Amendments to the Claims:

Please amend the claims to read as follows:

1. (currently amended) An apparatus for dissipating heat and shielding electromagnetic radiation from at least one integrated circuit on a printed circuit board, the ~~system~~ apparatus comprising:

a printed circuit board comprising a plurality of layers including an inner conducting layer and an exterior layer having a surface ~~and~~ with at least one integrated circuit disposed thereon ~~on the surface, the printed circuit board surface having~~ and an electrically conductive region surrounding the at least one integrated circuit, the printed circuit board having a row of electrically conductive through-holes located adjacent to and along one side of the electrically conductive region, the electrically conductive through-holes being in electrical communication with the electrically conductive region and with the conducting layer; and

an electrically conductive cover portion having a top surface and a bottom edge, the top surface having at least one heat-dissipating structure extending therefrom and the bottom edge being in electrically conductive contact with the electrically conductive region of the printed circuit board, the electrically conductive cover portion defining a cavity that encloses the at least one integrated circuit on the surface of the printed circuit board to shield electromagnetic radiation, the at least one integrated circuit being in thermally conductive communication with the electrically conductive cover portion for transferring heat thereto to be dissipated by the at least one heat-dissipating structure.

2. (canceled).

3. (original) The apparatus of claim 1 wherein the electrically conductive cover portion is rectangular in shape.

4. (original) The apparatus of claim 1 wherein the electrically conductive cover portion is circular in shape.

5. (original) The apparatus of claim 1 wherein the top of the at least one heat-dissipating structure is flat.

6. (original) The apparatus of claim 1 wherein the top of the at least one heat-dissipating is curved.

7. (original) The apparatus of claim 1 wherein the cavity of the electrically conductive cover portion is sized to cover the at least one integrated circuit to within a specified separation distance between a top

surface of the at least one integrated circuit and a lower surface of the electrically conductive cover portion.

8. (original) The apparatus of claim 1, further comprising a thermally conductive compound disposed in the cavity of the electrically conductive cover portion to produce thermally conductive communication between the at least one integrated circuit and the electrically conductive cover portion.

9. (original) The apparatus of claim 1, wherein the electrically conductive cover portion includes a hole to insert a malleable thermally conductive compound into the cavity of the electrically conductive cover portion.

10. (original) The apparatus of claim 1, wherein the at least one heat-dissipating structure is an integral part of the electrically conductive cover portion.

11. (original) The apparatus of claim 1, wherein the cavity of the electrically conductive cover portion encloses two or more integrated circuits.

12. (currently amended) A printed circuit board, comprising:

a plurality of layers including an inner conducting layer and an exterior layer having a board surface having an electrically conductive region formed thereon that surrounds an area of the board surface ~~the at least one integrated circuit~~;

a row of electrically conductive through-holes located adjacent to and along one side of the electrically conductive region, the electrically conductive through-holes being in electrical communication with the electrically conductive region and with the inner conducting layer;

~~an~~ at least one integrated circuit on the board surface within the surrounded area; and

an electrically conductive cover portion having a top surface and a bottom edge, the top surface having at least one heat-dissipating structure extending therefrom, the bottom edge being in electrically conductive contact with the electrically conductive region that surrounds the area with the at least one integrated circuit, the electrically conductive cover portion defining a cavity that encloses the at least one integrated circuit on the board surface to shield electromagnetic radiation, the at least one integrated circuit being in thermally conductive communication with the electrically conductive cover portion for transferring heat thereto to be dissipated by the at least one heat-dissipating structure.

13. (canceled)

14. (original) The printed circuit board of claim 12, wherein the electrically conductive cover portion is rectangular in shape.

15. (original) The printed circuit board of claim 12, wherein the cavity of the electrically conductive cover portion is sized to cover the at least one integrated circuit to within a specified separation distance between a top surface of the at least one integrated circuit and a lower surface of the electrically conductive cover portion.

16. (original) The printed circuit board of claim 12, further comprising a thermally conductive compound disposed in the cavity of the electrically conductive cover portion to produce thermally conductive communication between the at least one integrated circuit and the electrically conductive cover portion.

17. (original) The printed circuit board of claim 12, wherein the electrically conductive cover portion includes a hole to insert a malleable thermally

conductive compound into the cavity of the electrically conductive cover portion.

18. (original) The printed circuit board of claim 12, wherein the at least one heat-dissipating structure is an integral part of the electrically conductive cover portion.

19. (original) The printed circuit board of claim 12, wherein the cavity of the electrically conductive cover portion encloses two or more integrated circuits.

20. (new) The apparatus of claim 1, wherein the electrically conductive region forms a plurality of corners, the side along which the row of through-holes is located extends inwardly from the corners toward the at least one integrated circuit, and the row of electrically conductive through-holes is located in an indented region formed between adjacent corners by the side.

21. (new) The printed circuit board of claim 12, wherein the electrically conductive region forms a plurality of corners, the side along which the row of through-holes is located extends inwardly from the corners toward the at least one integrated circuit, and the row of electrically conductive

through-holes is located in an indented region formed between adjacent corners by the side.